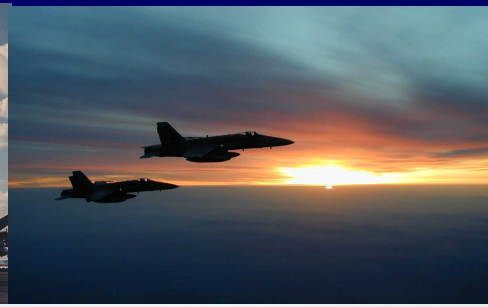
CSG/ESG WCC Operational & Off-Duty Risk Management (ORM)




Objectives

- ***NOT*** here to give the 2 day ORM fundamentals course
- Quick overview of ORM and what CSG/ESG's role is in ensuring its implementation during the FRP
  - *Where are we?*
  - *How did we get here?*
  - *Where are we going?*
  - *How do we ensure mission success?*

Self-Assessment

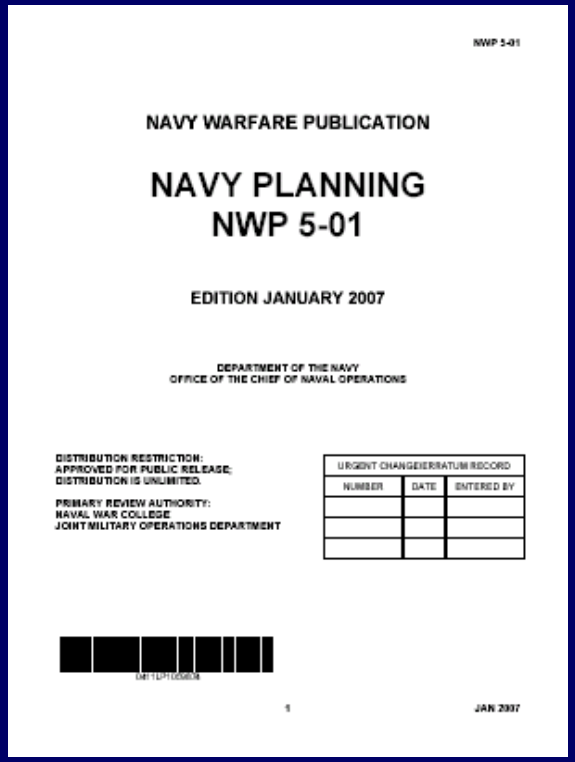
- Is it worth it?
- What is different today?
- What can happen to me?
- Do the benefits (mission) outweigh the costs (forces)?
- How can I keep it from effecting the mission or of hurting me --
- What can I learn from this?
- If I see something wrong (hazard/threat/process), who do I tell?

ORM

This brief is

UNCLASSIFIED

References



NWP 5-01

NAVY WARFARE PUBLICATION

NAVY PLANNING
NWP 5-01

EDITION JANUARY 2007

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OFFICE OF THE CHIEF OF NAVAL OPERATIONS

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URGENT CHANGE/ERRATUM RECORD		
NUMBER	DATE	ENTERED BY

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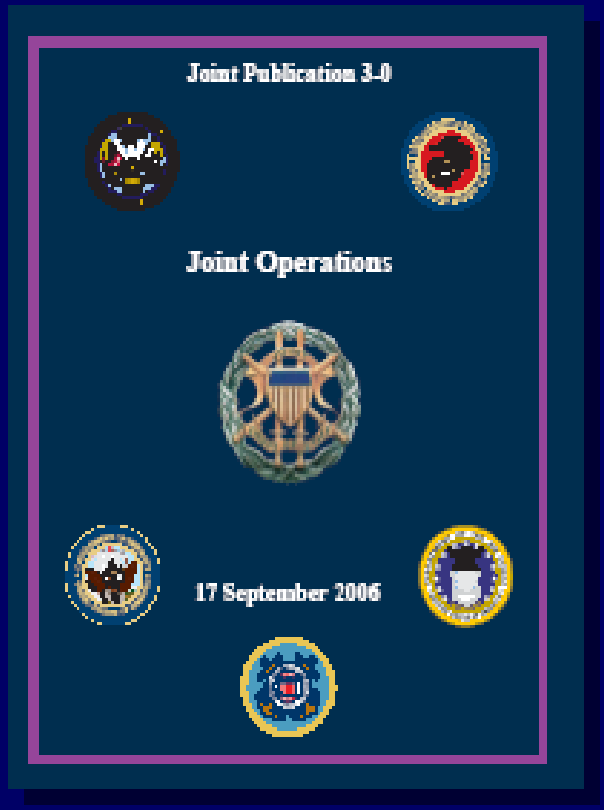
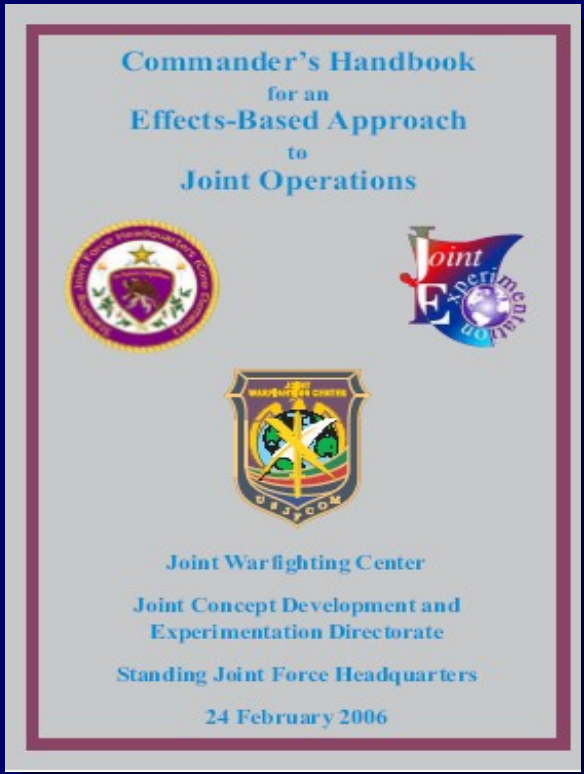
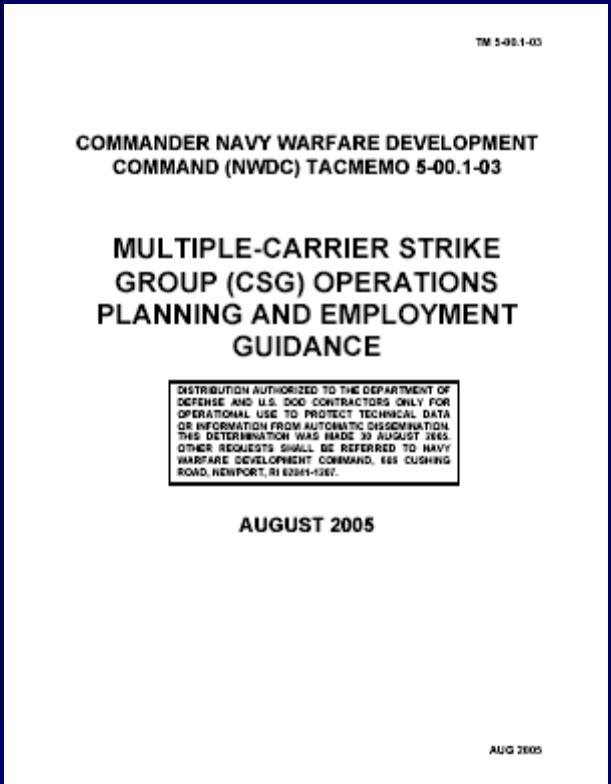
1

JAN 2007



References


Commander's Handbook
for an
Effects-Based Approach
to
Joint Operations
Joint Warfighting Center
Joint Concept Development and
Experimentation Directorate
Standing Joint Force Headquarters
24 February 2006


TM 5-00.1-03
COMMANDER NAVY WARFARE DEVELOPMENT COMMAND (NWDC) TACMEMO 5-00.1-03
MULTIPLE-CARRIER STRIKE GROUP (CSG) OPERATIONS PLANNING AND EMPLOYMENT GUIDANCE
DISTRIBUTION AUTHORIZED TO THE DEPARTMENT OF DEFENSE AND U.S. DOD CONTRACTORS ONLY FOR OPERATIONAL USE TO PROTECT TECHNICAL DATA OR INFORMATION FROM AUTOMATIC DISSEMINATION. THIS DETERMINATION WAS MADE 30 AUGUST 2005. OTHER REQUESTS SHALL BE REFERRED TO NAVY WARFARE DEVELOPMENT COMMAND, 686 CUSHING ROAD, NEWPORT, RI 02841-1207.
AUGUST 2005
AUG 2005


ARMY, MARINE CORPS, NAVY, AIR FORCE
RISK MANAGEMENT
FM 3-100.12
MCRP 5-12.1C
NTTP 5-03.5
AFTTP(I) 3-2.34
AIR LAND SEA APPLICATION CENTER
FEBRUARY 2001
MULTISERVICE TACTICS, TECHNIQUES, AND PROCEDURES

Bottom Line Up Front (BLUF)

- Common Language/Terms
- Three Levels of ORM
  1. In-depth
  2. Deliberate
  3. Time Critical
- Four principles of ORM
  1. Anticipate and manage risk by planning
  2. Make risk decisions at the appropriate level
  3. Accept risk when benefits outweigh costs
  4. Accept no unnecessary risks
- Five steps of ORM

  1. **I**dentify hazards
  2. **A**ssess hazards
  3. **M**ake risk decisions
  4. **I**mplement controls
  5. **S**upervise

  Four steps of Time Critical ORM

  1. **A**ssess situation for hazards/risks
  2. **B**alance resources to control risks
  3. **C**ommunicate risks and

Operational Risk Management

Big Picture

- VCNO has tasked the Operations Safety Committee (OSC) with revamping ORM in the Navy & implementing a strategy to ensure inculcation into the Navy culture
- Naval Safety Center (NSC) - heads up the OSC ORM working group and was designated as the Navy's ORM Model Manager
- OPNAV 3500.39B (30 July 2004) in rewrite
- CSFTL directs "cradle to grave" approach WRT Strike Group ORM training (You will be formally assessed during FRTP)

Risk Management Is

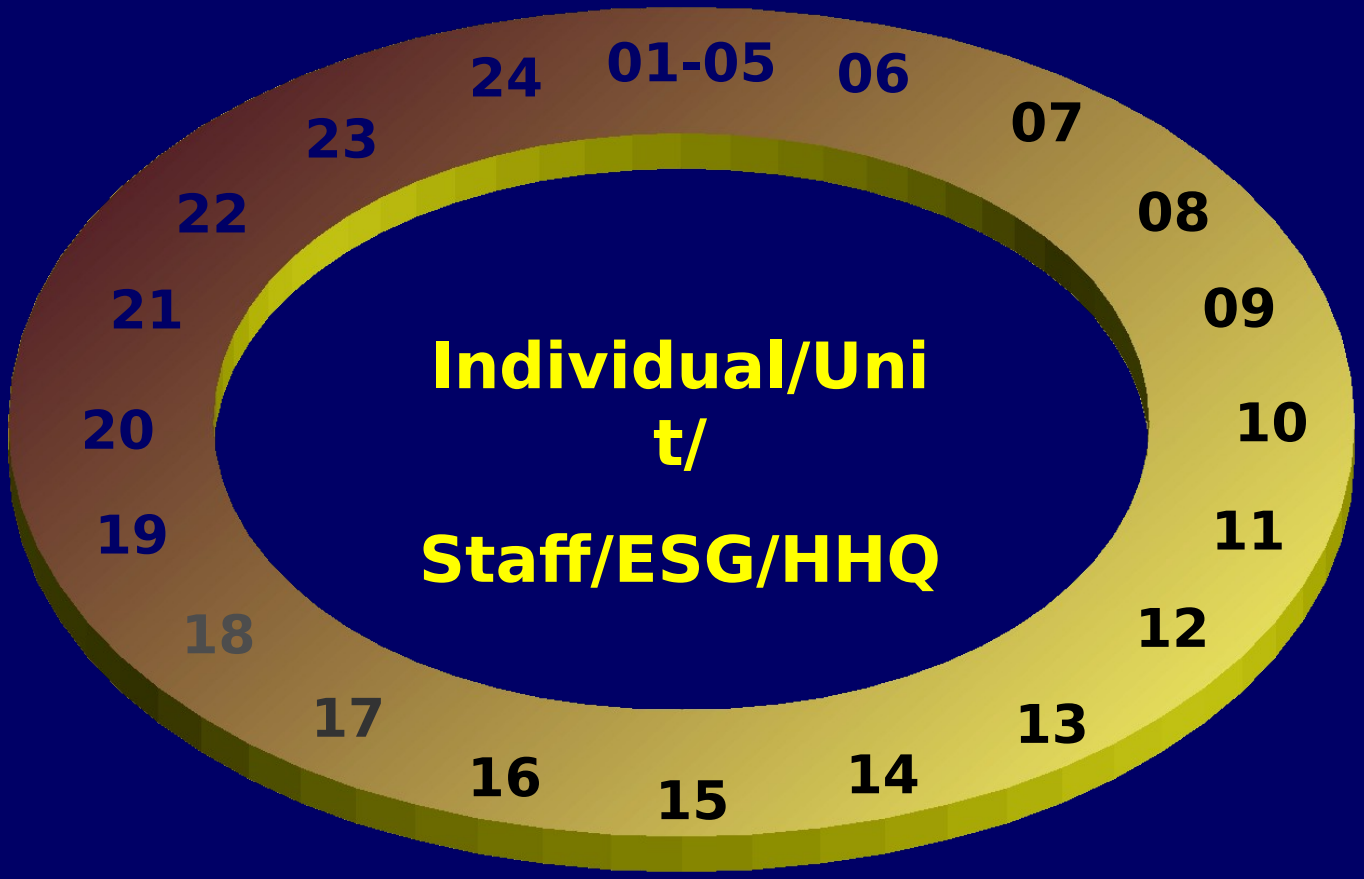
- Risk Management:
  - Process that assists decision makers in reducing or offsetting risk by systematically identifying, assessing and controlling risk arising from operational factors and making decisions that weigh risks against mission benefits. Goal is to enhance operational capabilities and mission accomplishment, with minimal loss.

“Discipline for living with the possibility that future events may cause adverse effects”

Risk Management Does Not:

- Replace sound tactical decision making
- Inhibit the Commander's & Leader's flexibility, initiative and accountability
- Remove risk altogether or support a "zero defect" mindset
- Sanction or justify violating the law
- Remove the necessity for rehearsals, tactics, techniques and procedures (TTP)

Battle Rhythm



Individual Mission Analysis

THE DRIVE TO WORK

- Check weather & traffic for changes
- Check car for readiness & back out of driveway
- Follow prescribed route to work
- Adjust to contin-gencies
- Park at proper position at work

What ORM “IS”

- A mindset and/or methodology applicable to any activity
- Accomplishing the mission with acceptable risk
- Planning using a standard process (5 Steps)
- A continuous, flexible process
- Following procedures (controls)
- Watching for change (supervising)
- Working as a team

- Best when applied as a team
- Asking "What's Different"
- Skill and knowledge dependent
- Sharing experience, lessons learned
- Using available tools/resources
- Applied, standardized "common sense"
- "Looking before you leap"
- As in-depth as you have time for

What ORM “IS NOT”

- About avoiding risk
- A safety only program
- Limited to complex-high risk evolutions
- A program -- but a process
- Only for on-duty
- Just for your boss
- Just a planning tool
- Automatic
- Static
- Difficult
- Someone else’s job
- A well kept secret

- A fail-safe process
- A bunch of checklists
- Just a bullet in a briefing guide
- “TQL”
- Going away

Risk Definitions

- *ORM* is a systematic approach to managing risks to acceptable levels to ***increase mission success*** with minimal losses. This involves identifying and assessing hazards/threats, controlling risks, supervising and revising as needed.
- Hazard/Threat – A condition, source of danger, with the potential to cause personal injury or death, property damage, **or** ***mission degradation***
- Risk – An expression of possible loss in terms of ***probability*** and ***severity***

Risk Definitions

- Identified Risk
  - A risk determined by applying severity and probability analysis to an identified hazard/threat before risk control actions are applied
- Residual Risk
  - Risk remaining after controls have been identified and selected for hazards/threats that may result in degradation or loss of combat power
- Acceptable Risk
  - The level of residual risk that the commander agrees to accept for a hazard/threat without further risk control actions
- Collective Risk
  - Aggregate or accumulative level of residual risk, taking into consideration the cross functional relationships between all hazards/threats and risk control actions

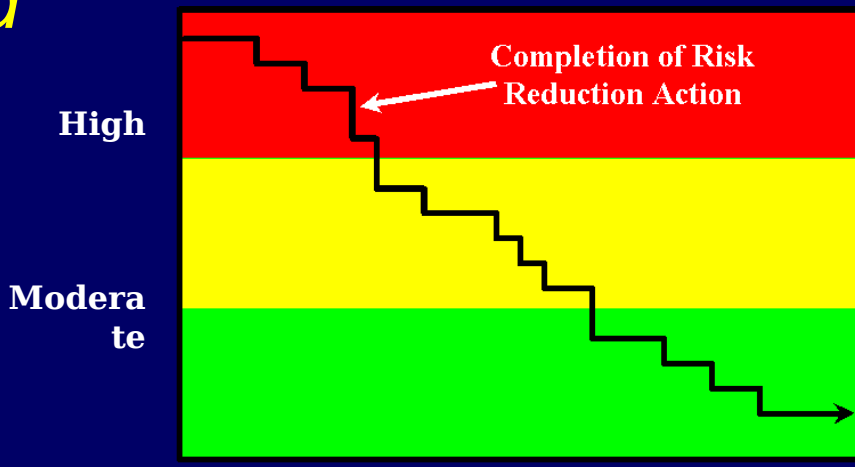
ORM Process Levels

- In-depth – formal application of all five steps but with a very thorough hazard identification and risk assessment through research, testing, simulation, statistics, etc.
- Deliberate – formal application of the complete five-step process where hazards/ threats, risks, controls, and supervision are documented
- Time Critical – application of the principles and functional processes during execution where time precludes a formal approach

Risk Management Concepts

- Accept no unnecessary risk
- Make risk decisions at the appropriate level
- Accept risk when benefits outweigh the cost (opportunity)
- Anticipate and manage risk by planning
  - Risks can be mitigated and prevented (Need to have a plan to do so)
- *If managed, risks should decline over time*

  (As mitigation events/controls are accomplished successfully)



Types of Risk

- Risk to Mission:
  - Focus during Mission Analysis phase
  - Reference USFF Force Operating Posture guidance
  - Output is prioritized list of hazards/threats that could potentially impact mission accomplishment (COA development).
- Risk to Forces:
  - CONOPS development, execution and sustainment once risk assessment to mission complete.
  - What impact do the new hazards/threats have on our forces above and beyond the baseline?

Examples

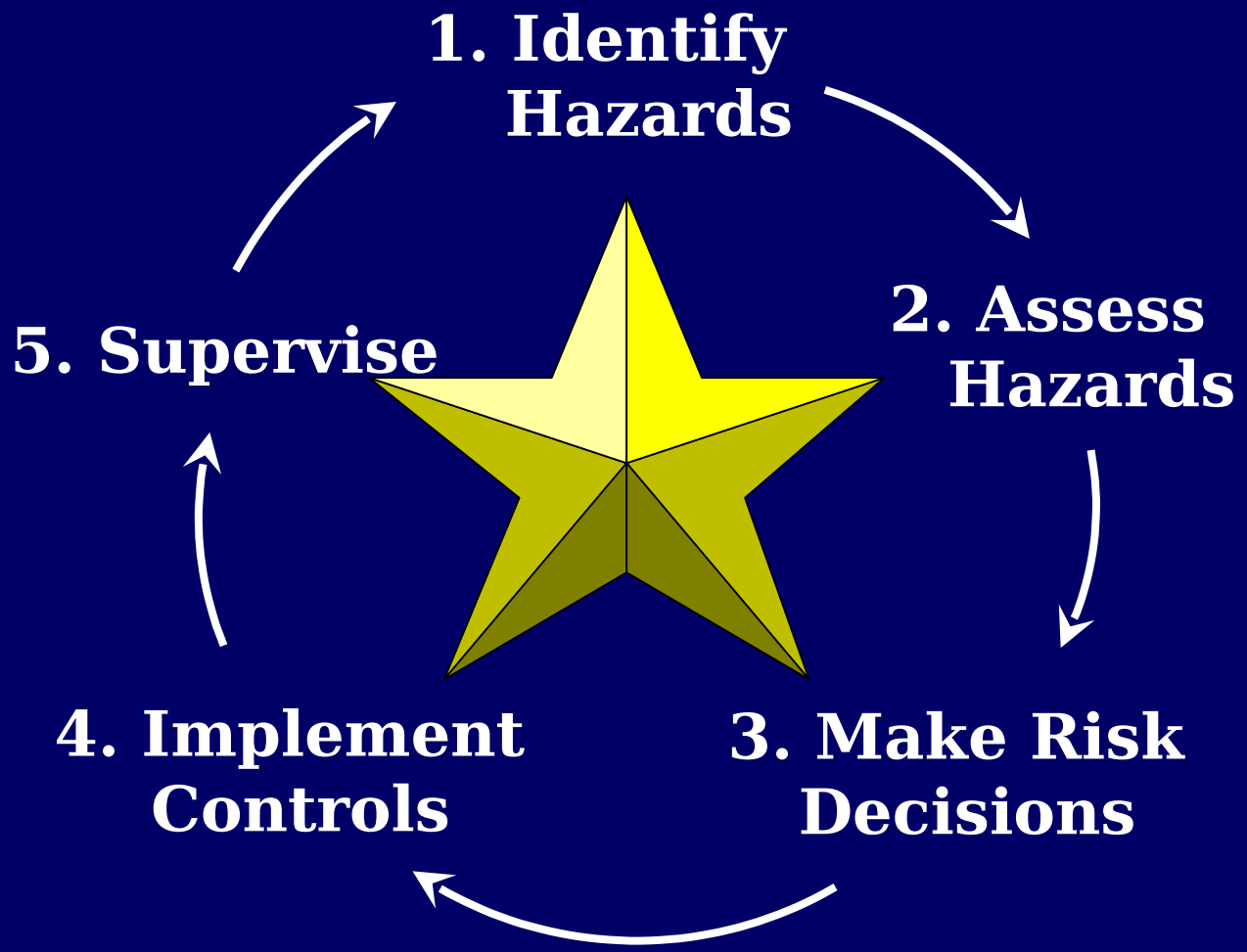
Risk to Mission

- Communications Architecture (24/7 Naval, Joint, Combined)
- Risk of miscalculation by Adversary
- ROE
- Concurrent tasking (force capacity/capability vs demand)
- Mis-ID LSF (aggressive overreaction)

Risk to Forces

- Communications (loss of/functional flow)
- Force Protection/Force Posture
- Fratricide/Complacency
- Drowning (MOB/VBSS)
- Collision in high density area (Strait)

In-Depth/Deliberate ORM Process



Identify Hazards/Threats

Operational Analysis

Determine specified & implied tasks

Break down into small steps

Pull from lessons learned

List Hazards

List hazards for each step

Use "What if…" tool

Focus on "What's different today?"

Determine Hazard Root Causes

Target root causes vice symptoms

Keep asking "Why?" until answered

Involve Operators / Subject Matter Experts

Deliberate ORM Example

Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
Grounding/Flooding/ Navigation error						
Blue/White Collision						
Non-compliant, non-squawking low slow flyer						
Tide/current/waves						
Fog/Reduced visibility/Inclement weather						
Unknown submarine IVO PIM/Vital Area						
Terrorist attack						
Inattention/ complacency						

= Critical Risk = Serious Risk = Moderate Risk = Minor Risk = Negligible Risk

Assess Hazards

Assess Severity

What's the impact on mission, people, & things

Assess Probability

What's the probability of all factors

Use past data

Look at total exposure

Complete Risk Assessment

Use risk assessment matrix

Rank hazards by risk level

Involve Operators / Subject Matter Experts

Risk Assessment Matrix

Risk Assessment Code

1 = Critical
2 = Serious
3 = Moderate
4 = Minor
5 = Negligible

Risk Management Matrix OPNAVINST 3500.39B		PROBABILITY			
		A Likely	B Probable	C May	D Unlikely
SEVERITY	I Death, Loss of Asset	1	1	2	3
	II Severe Injury, Damage	1	2	3	4
	III Minor Injury, Damage	2	3	4	5
	IV Minimal Threat	3	4	5	5

1-Critical 2-Serious 3-Moderate 4-Minor 5-Negligible

Severity and Probability

SEVERITY

Category I - The hazard may cause **death, loss of facility/asset, or mission failure.**

Category II - The hazard may cause **severe** injury, illness, property damage, or **serious mission degradation**.

Category III - The hazard may cause **minor** injury, illness, property damage, or **minor mission degradation**.

Category IV - The hazard presents a **minimal** threat to personnel safety or health,

PROBABILITY

Sub-Category A - Likely to occur immediately or within a short period of time. Expected to occur frequently to an individual item or person or continuously to a fleet, inventory or group.

Sub-Category B - Probably will occur in time. Expected to occur several times to an individual item or person or frequently to a fleet, inventory or group.

Sub-Category C - May occur in time. Can reasonably be expected to occur some time to an individual item or person or several times to a fleet, inventory or group.

Risk Assessment Code Matrix

Category	Definition
Catastrophic (I)	Loss of ability to accomplish the mission or mission failure. Unacceptable collateral damage (CD)
Critical (II)	Significant degraded mission capability, unit readiness, or personal damage. Significant CD
Marginal (III)	**Degraded mission capability or unit readiness. Minor damage to equipment/systems. Injury of personnel**
Negligible (IV)	Little or no adverse impact on mission capability

Category	Definition
Frequent	Occurs very often. Expected to occur several times during a specific mission or operation
Likely	Occurs several times – expected to occur during a specific mission or operation
Occasional	Occurs over a period of time. May occur during a specific mission or operation, but not often
Seldom	**Occurs as an isolated incident. Remotely possible, but not expected to occur during a specific mission or operation**
Unlikely	Occurrence not impossible, but may assume will not occur during a specific mission or operation

		Freq A	Likely B	Occsn C	Seldm D	Unlky E
Catastrophic	I	E	E	H	H	M
Critical	II	E	H	H	M	L
Marginal	III	H	M	M	L	L
Negligible	IV	M	L	L	L	L

Deliberate ORM Example

Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
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Non-compliant, non-squawking low slow flyer						
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Terrorist attack						
Inattention/ complacency						

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Deliberate ORM Example

Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
Grounding/Flooding/ Navigation error	C, II	3				
Blue/White Collision	C, I					
Non-compliant, non-squawking low slow flyer	B, I					
Tide/current/waves	A, III					
Fog/Reduced visibility/Inclement weather	B, II					
Unknown submarine IVO PIM/Vital Area	B, II					
Terrorist attack	D, I					
Inattention/ complacency	A, III					

Risk Management Matrix **OPNAVINST 3500.39B**

SEVERITY	PROBABILITY A Likely	B Probable	C May	D Unlikely
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Deliberate ORM Example

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Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
Grounding/Flooding/ Navigation error	C, II	3				
Blue/White Collision	C, I	2				
Non-compliant, non-squawking low slow flyer	B, I	1				
Tide/current/waves	A, III	2				
Fog/Reduced visibility/Inclement weather	B, II	2				
Unknown submarine IVO PIM/Vital Area	B, II	2				
Terrorist attack	D, I	3				
Inattention/ complacency	A, III	2				

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Deliberate ORM Example

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Blue/White Collision	C, I	2				
Non-compliant, non-squawking low slow flyer	B, I	1				
Tide/current/waves	A, III	2				
Fog/Reduced visibility/Inclement weather	B, II	2				
Unknown submarine IVO PIM/Vital Area	B, II	2				
Terrorist attack	D, I	3				
Inattention/ complacency	A, III	2				

Identified Risk

Risk Management Matrix OPNAVINST 3500.39B

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Make Risk Decisions

Identify Risk Control Actions

Systems / Engineering:
- Material selection, Design
- Often not feasible

Supervisory / Administrative:
- Instructions, Policies, SOPs, ROEs
- Flight briefs, checklists
- Training, tactics
- Effective if properly used / enforced

Personal Protective Equipment:
- Eye & hearing protection
- Flight & survival Gear
- Least effective type of control - does not reduce the probability of a mishap occurring, it only reduces the severity when a mishap does occur.

Determine Control Effects

What's the impact on probability & severity

What's the risk control cost

How do they work together

Make Risk Decisions

Determine residual risk

Make risk decisions at right level

Ensure benefits outweigh costs

Involve Operators / Subject Matter Experts

Deliberate ORM Example

Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
Grounding/Flooding/ Navigation error	C, II	3	SUWC: ensure ships' report RMD in effect, fixes every 2 min. w/ confidence & sources, OOD/Conn be proactive w/ identifying & communicating.			
Blue/White Collision	C, I	2	SUWC: pass shipping info., ships adhere to Rules of the Road, use Furuno/ARPA, dec. speed in strait, pass contacts to BWC/SUWC on net.			
Non-compliant, non-squawking low slow flyer	B, I	1	ADC: proactively identify & resolve tracks; CFMCC: set weapons posture & status for threat; IWC: monitor & report I&W to BWC/ADC on net.			
Tide/current/waves	A, III	2	SUWC: plan during favorable conditions, pass to restrict access to wx decks during high seas, update BWC on changes.			
Fog/Reduced visibility/Inclement weather	B, II	2	SUWC: ensure ships report restrictred visibility detail, use bell & horn, slow as needed.			
Unknown submarine IVO PIM/Vital Area	B, II	2	ASWC: notify BWC/SUWC of known/unknown sub location; BWC: launch alert ASW if needed.			
Terrorist attack	D, I	3	BWC: PPRs; SUWC: man ships' 50-cals.; ADC: direct ATFP/SAR helo			
Inattention/ complacency	A, III	2	SUWC: limit RMD watch duration; ALL: ensure rested & nourished			

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Non-compliant, non-squawking low slow flyer	B, I	1	ADC: proactively identify & resolve tracks; CFMCC: set weapons posture & status for threat; IWC: monitor & report I&W to BWC/ADC on net.	C, II		
Tide/current/waves	A, III	2	SUWC: plan during favorable conditions, pass to restrict access to wx decks during high seas, update BWC on changes.	A, IV		
Fog/Reduced visibility/Inclement weather	B, II	2	SUWC: ensure ships report restrictred visibility detail, use bell & horn, slow as needed.	B, IV		
Unknown submarine IVO PIM/Vital Area	B, II	2	ASWC: notify BWC/SUWC of known/unknown sub location; BWC: launch alert ASW if needed.	C, III		
Terrorist attack	D, I	3	BWC: PPRs; SUWC: man ships' 50-cals.; ADC: direct ATFP/SAR helo	D, III		
Inattention/ complacency	A, III	2	SUWC: limit RMD watch duration; ALL: ensure rested & nourished	B, III		

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Tide/current/waves	A, III	2	SUWC: plan during favorable conditions, pass to restrict access to wx decks during high seas, update BWC on changes.	A, IV	3	
Fog/Reduced visibility/Inclement weather	B, II	2	SUWC: ensure ships report restrictred visibility detail, use bell & horn, slow as needed.	B, IV	4	
Unknown submarine IVO PIM/Vital Area	B, II	2	ASWC: notify BWC/SUWC of known/unknown sub location; BWC: launch alert ASW if needed.	C, III	4	
Terrorist attack	D, I	3	BWC: PPRs; SUWC: man ships' 50-cals.; ADC: direct ATFP/SAR helo	D, III	5	
Inattention/ complacency	A, III	2	SUWC: limit RMD watch duration; ALL: ensure rested & nourished	B, III	3	

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Non-compliant, non-squawking low slow flyer	B, I	1	ADC: proactively identify & resolve tracks; CFMCC: set weapons posture & status for threat; IWC: monitor & report I&W to BWC/ADC on net.	C, II	3	
Tide/current/waves	A, III	2	SUWC: plan during favorable conditions, pass to restrict access to wx decks during high seas, update BWC on changes.	A, IV	3	
Fog/Reduced visibility/Inclement weather	B, II	2	SUWC: ensure ships report restrictred visibility detail, use bell & horn, slow as needed.	B, IV	4	
Unknown submarine IVO PIM/Vital Area	B, II	2	ASWC: notify BWC/SUWC of known/unknown sub location; BWC: launch alert ASW if needed.	C, III	4	
Terrorist attack	D, I	3	BWC: PPRs; SUWC: man ships' 50-cals.; ADC: direct ATFP/SAR helo	D, III	5	
Inattention/ complacency	A, III	2	SUWC: limit RMD watch duration; ALL: ensure rested & nourished	B, III	3	

Residual Risk

Risk Management Matrix OPNAVINST 3500.39B

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II Severe Injury, Damage	1	2	3	4
III Minor Injury, Damage	2	3	4	5
IV Minimal Threat	3	4	5	5

1-Critical 2-Serious 3-Moderate 4-Minor 5-Negligible

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Implement Controls

Make Implementation Clear

Use examples, pictures, or charts

Describe expectations clearly

Establish Accountability

Assign individuals clear risk control responsibilities

Provide Support

Command provide personnel & resources

Make it sustainable

Consider control conflicts

Involve Operators / Subject Matter Experts

Supervise/Assess

Monitor

Are the controls working

Manage emerging changes (ABC*D*)

Identify new hazards

Review

Measure risk controls' effectiveness

Was mission successful

Identify root causes of conditions that led to failures

Feedback

Implement new controls

Save all documentation

Recommend actionable solutions to prevent other failures

Submit lessons learned

Involve Operators / Subject Matter Experts

Deliberate ORM Example

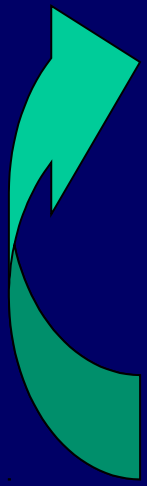
Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
Grounding/Flooding/ Navigation error	C, II	3	SUWC: ensure ships' report RMD in effect, fixes every 2 min. w/ confidence & sources, OOD/Conn be proactive w/ identifying & communicating.	D, II	4	SUWC: monitor all vessels & report when any vessel comes w/in 500 yds of shoal water; BWC: backup.
Blue/White Collision	C, I	2	SUWC: pass shipping info., ships adhere to Rules of the Road, use Furuno/ARPA, dec. speed in strait, pass contacts to BWC/SUWC on net.	D, II	4	SUWC: monitor all vessels for CBDR or min range inside vital area; BWC/ASWC: backup.
Non-compliant, non-squawking low slow flyer	B, I	1	ADC: proactively identify & resolve tracks; CFMCC: set weapons posture & status for threat; IWC: monitor & report I&W to BWC/ADC on net.	C, II	3	ADC: monitor all tracks for possible low slow flyers; IWC: monitor I&W; BWC: backup ADC/IWC.
Tide/current/waves	A, III	2	SUWC: plan during favorable conditions, pass to restrict access to wx decks during high seas, update BWC on changes.	A, IV	3	SUWC: monitor changing conditions; CSG OPS: call BWC if conditions become sig. different than forecast.
Fog/Reduced visibility/Inclement weather	B, II	2	SUWC: ensure ships report restrictred visibility detail, use bell & horn, slow as needed.	B, IV	4	SUWC: report when vis<3NM & low visibility set, monitor speed.
Unknown submarine IVO PIM/Vital Area	B, II	2	ASWC: notify BWC/SUWC of known/unknown sub location; BWC: launch alert ASW if needed.	C, III	4	ASWC: monitor all subsurface contacts & report possible locations for unknown; BWC/SUWC: backup.
Terrorist attack	D, I	3	BWC: PPRs; SUWC: man ships' 50-cals.; ADC: direct ATFP/SAR helo	D, III	5	SUWC/IWC: monitor I&W and use PPRs as required. BWC/ADC: backup.
Inattention/ complacency	A, III	2	SUWC: limit RMD watch duration; ALL: ensure rested & nourished	B, III	3	ALL: backup watches & supervisors relieve if needed

= Critical Risk = Serious Risk = Moderate Risk = Minor Risk = Negligible Risk

Time Critical ORM

An easy acronym can be used when time precludes In-Depth/Deliberate ORM:



Assess situation for hazards/risks

Balance Resources to control risks

Communicate risks, intentions, & changes

Do *(and debrief)* enact controls & monitor

The simplicity of the acronym allows us to tie the traditional
ORM Processes to more

TCRM Example

Straits Transit Risk Assessment

Hazard/Threat Effect	Assess	RAC	Risk Control Action	Re-assess	Residual	Supervision
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Balance resource to control risks

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Communicate risks and intentions

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Straits Transit Risk Assessment

TCRM Example

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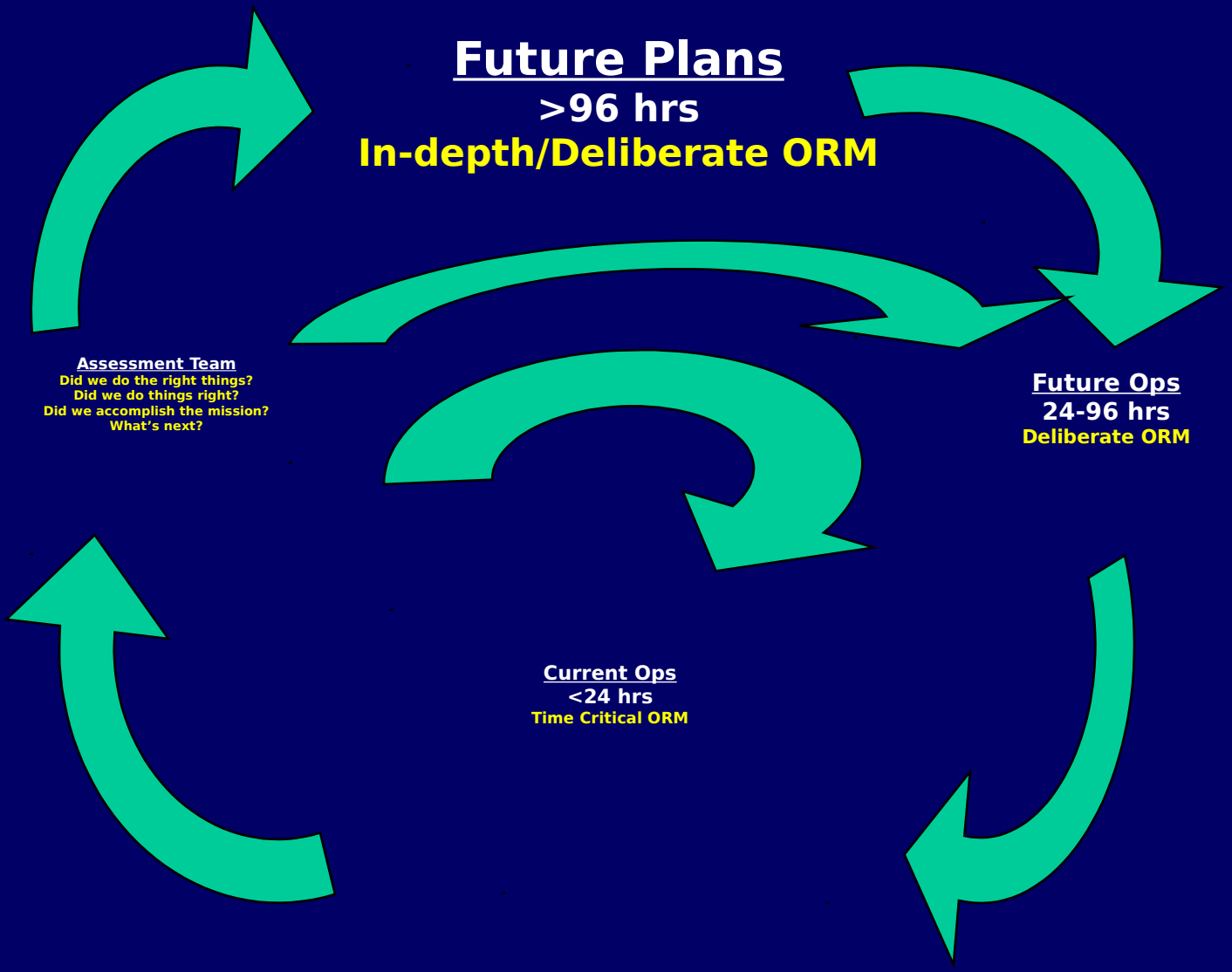
ORM ISO BRP&E


Future Plans
>96 hrs
In-depth/Deliberate ORM
Assessment Team
Did we do the right things?
Did we do things right?
Did we accomplish the mission?
What's next?
Future Ops
24-96 hrs
Deliberate ORM
Current Ops
<24 hrs
Time Critical ORM

Operational Risk Management

Review

- Common Language/Terms
- Three Levels of ORM
  1. In-depth
  2. Deliberate
  3. Time Critical
- Four principles of ORM
  1. Anticipate and manage risk by planning
  2. Make risk decisions at the appropriate level
  3. Accept risk when benefits outweigh costs
  4. Accept no unnecessary risks
- Five steps of ORM → Four steps of Time Critical ORM
  1. **I**dentify hazards → 1. **A**ssess situation for hazards/risks
  2. **A**ssess hazards → 2. **B**alance resources to control risks
  3. **M**ake risk decisions → 3. **C**ommunicate risks and

ORM Assessment

Who/When/Why/What/How

- ORM Assessors
  - TTGL Mentors – FST-GC/J
  - CSFTL Evaluators – COMPTUEX/FBP
- Will be observing and assessing complex SOE events for their use of ORM principles and processes
- Looking for specific “Critical/Extreme” & “Serious/High” risk identified hazards/threats and “Moderate” residual risk hazards/threats unique to mission/circumstances
- Not just hazard ID in the planning/briefing… how well was the plan communicated, executed, debriefed/assessed, & lessons learned/best practices captured & disseminated
- Metrics included in overall Pb views assessment

Summary

- Risk is 2 dimensional
- Risk has 2 types
  - Risk to Mission
  - Risk to Forces
- Assessment tool provides:
  - Standardized format for risk assessment
    - Satisfies “I AM” &/or “ABC”
  - Identifies Commander’s critical risk to mission/forces & improves communication throughout COC
  - Supports GO/NO-GO criteria

More Information on ORM

For more information on the Navy's ORM initiatives, strategy, assessment and sample model unit:

www.safetycenter.navy.mil/orm/orm_explanation.htm

For ORM Best Practice information:

http://205.0.132.75/training/ttglant

http://205.0.132.75/navy/ccg4

THERE IS NOTHING MORE
TERRIFYING THAN
IGNORANCE IN ACTION

Risk Assessment Code Matrix

Probability

Severity

	Likely A	Probable B	May C	Unlikely D
Catast-Rophic (I)	1	1	2	3
Critical (II)	1	2	3	4
Mod-erate (III)	2	3	4	5
Negli Gible (IV)	3	4	5	5

1= CRITICAL
2= SERIOUS
3= MODERATE
4= MINOR
5= NEGLIGIBLE

Probability

A: Likely – occurs several times – expected to occur during a specific mission or operation

B: Probable – occurs over a period of time. May occur during a specific mission or operation, but not often

C: May/Seldom – Occurs as an isolated incident.Remotely possible, but not likely to occur during a specific mission or operation

D: Unlikely - Occurrence not impossible but lay assume will not occur during a specific

Severity

Catastrophic (I): Loss of ability to accomplish the mission or mission failure. Unacceptable collateral damage (CD) May cause death, loss of facility/asset

Critical (II): Significant degraded mission capability, unit readiness, or personal damage. Significant CD. May cause severe injury, illness, property damage

Moderate (III): Degraded mission capability or unit readiness. Minor damage to equipment/systems. May cause minor injury of personnel, illness, property damage